Product datasheet

Specifications





servo motor BMH, Lexium 32, 8.4Nm, 6000rpm, keyed shaft, without brake, IP65, IP67, 128bit encoder, straight

BMH1003P31A1A

Main

Device short name	ВМН			
product or component type	Servo motor			
Maximum mechanical speed	6000 rpm			
Continuous stall torque	8.4 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 8.4 N.m for LXM32.D30N4 at 10 A, 480 V, three phase			
Peak stall torque	25.1 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 25.1 N.m for LXM32.D30N4 at 10 A, 480 V, three phase			
Nominal output power	2700 W for LXM32.D30N4 at 10 A, 400 V, three phase 2700 W for LXM32.D30N4 at 10 A, 480 V, three phase			
Nominal torque	6.2 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 6.2 N.m for LXM32.D30N4 at 10 A, 480 V, three phase			
Nominal speed	4000 rpm for LXM32.D30N4 at 10 A, 400 V, three phase 4000 rpm for LXM32.D30N4 at 10 A, 480 V, three phase			
Product compatibility	LXM32.D30N4 at 400480 V three phase			
Shaft end	Keyed			
IP degree of protection	IP65 standard IP67 with IP67 kit			
Speed feedback resolution	131072 points/turn			
Holding brake	Without			
mounting support	International standard flange			
Electrical connection	Straight connectors			

Complementary

Range compatibility	Lexium 32			
[Us] rated supply voltage	480 V			
Network number of phases	Three phase			
Continuous stall current	7.69 A			
Continuous power	3.3 W			
Maximum current Irms	29.1 A for LXM32.D30N4			
Maximum permanent current	29.1 A			
Second shaft	Without second shaft end			
Shaft diameter	19 mm			
Shaft length	40 mm			
Key width	30 mm			

Feedback type	Single turn SinCos Hiperface		
Motor flange size	100 mm		
Number of motor stacks	3		
Torque constant	1 N.m/A at 120 °C		
Back emf constant	63.5 V/krpm at 120 °C		
Number of motor poles	10		
Rotor inertia	9.37 kg.cm ²		
Stator resistance	0.63 Ohm at 20 °C		
Stator inductance	4 mH at 20 °C		
Stator electrical time constant	6.3 ms at 20 °C		
Maximum radial force Fr	1050 N at 1000 rpm 830 N at 2000 rpm 730 N at 3000 rpm 660 N at 4000 rpm 610 N at 5000 rpm		
Maximum axial force Fa	0.2 x Fr		
Type of cooling	Natural convection		
Length	192.6 mm		
Centring collar diameter	95 mm		
Centring collar depth	3.5 mm		
Number of mounting holes	4		
Mounting holes diameter	9 mm		
Circle diameter of the mounting holes	115 mm		
net weight	6.5 kg		

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	22.0 cm
Package 1 Width	20.0 cm
Package 1 Length	40.0 cm
Package 1 Weight	6.8 kg

Contractual warranty

Warranty

18 months

Sustainability Screen Premium

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

Well-being performance

Mercury Free
Rohs Exemption Information Yes
Pvc Free

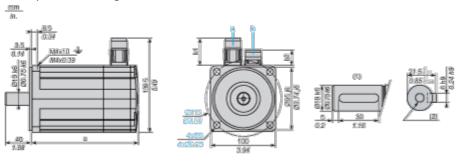
Certifications & Standards

Reach Regulation	REACh Declaration		
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)		
China Rohs Regulation	China RoHS declaration		
Environmental Disclosure	Product Environmental Profile		
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins		
Circularity Profile	No need of specific recycling operations		

Dimensions Drawings

Servo Motors Dimensions

Example with Straight Connectors



a: Power supply for servo motor brake

b: Power supply for servo motor encoder

- (1) Shaft end, keyed slot (optional)
- (2) For screw M6 x 21 mm/M6 x 0.83 in.

Dimensions in mm

Straight c	onnectors	Rotatable angled connectors		a (without braka)	o (with broko)
b1	b2	b1	b2	c (without brake)	c (with brake)
39.5	25.5	39.5	39.5	192	234

Dimensions in in.

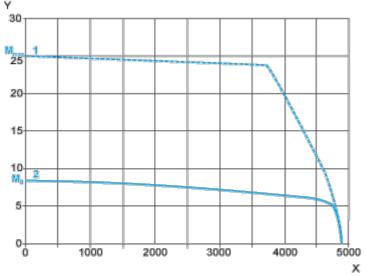
Straight c	onnectors	Rotatable angled connectors		a (without braka)	o (with broko)
b1	b2	b1	b2	c (without brake)	c (with brake)
1.55	1.00	1.55	1.55	7.55	9.21

Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

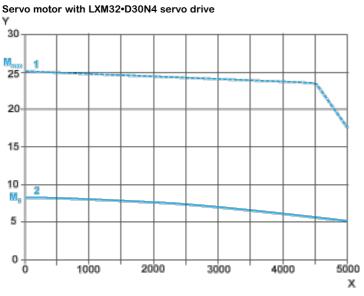
Servo motor with LXM32•D30N4 servo drive



- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves



X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque